

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Superfund Records Center

SITE: Wells 99H

BREAK: 3.2

OTHER: 549610

DATE: July 2, 1987

SUBJECT: Unifirst Corporation - Woburn, MA  
Sample ResultsFROM: Edward J. Kim  
Water Section (ESD-LEX)TO: Barbara Newman  
Superfund

SDMS DocID

549610

For your review, enclosed are the sample results collected at Unifirst Corporation, Woburn, MA, in the month of November of 1986, specifically on these days 3, 4, 5, 10, and 17 in November.

During this period four monitoring wells (Wells UC4, UC5, UC6, and UC7) were installed on the property of Unifirst Corporation by the company's contractor, ERT. The well locations were selected on what was thought by Jeff Lawson of ERT and Dave Delaney of EPA to be locations of possible contamination. Figure I. illustrates the the well installation locations. In general, the drilling procedures included soil boring, soil sampling, classification, and field tests.

The soil samples collected via split-spoon procedures were visually classified and logged by Jeff Lawson of ERT. Each split-spoon sample collected were immediately split upon collection between ERT and EPA. Representative portions of each split-spoon sample was collected into pre-washed and baked 40 ml VOA vials and preserved on ice immediately upon collection. The split-spoon sampler employed by ERT was cleaned by Jeff Lawson before each sample was taken. The cleaning process consisted of initially rinsing the split-spoon sampler with wash water, then with methanol, and finally distilled water.

EPA portion of the split-spoon samples were contracted to EA Engineering, Science, and Technology, Inc. (Sample number 52958, 52959, 52960, 52961, 52962, 52963, 52964, and 52966) and California Water Labs (Sample number 63004, 63005, 63006, 63007, 63008, 63009, 63010, 63011, 63012, and 63012) for VOA analysis. In addition to split-spoon samples, Woburn water used occasionally during the drilling process (63005) and surface soil samples at Well UC7 (52959, 52960, 52961) were collected for VOA analysis. Duplicate samples were collected at Well UC7 (SS1 and SS1A, and #2 and #2A). The results for all these samples are shown on Table I. with another pertinent informations. Please note that those volatile organic compounds not listed in Table I. were excluded because they were found to be below the Contract Required Detection Limit (CRDL) and the specific detection limits for for each of the volatile organic compounds maybe found in Table II.

If you have any further question or require more information, please contact me at 861-6700 extension 234.

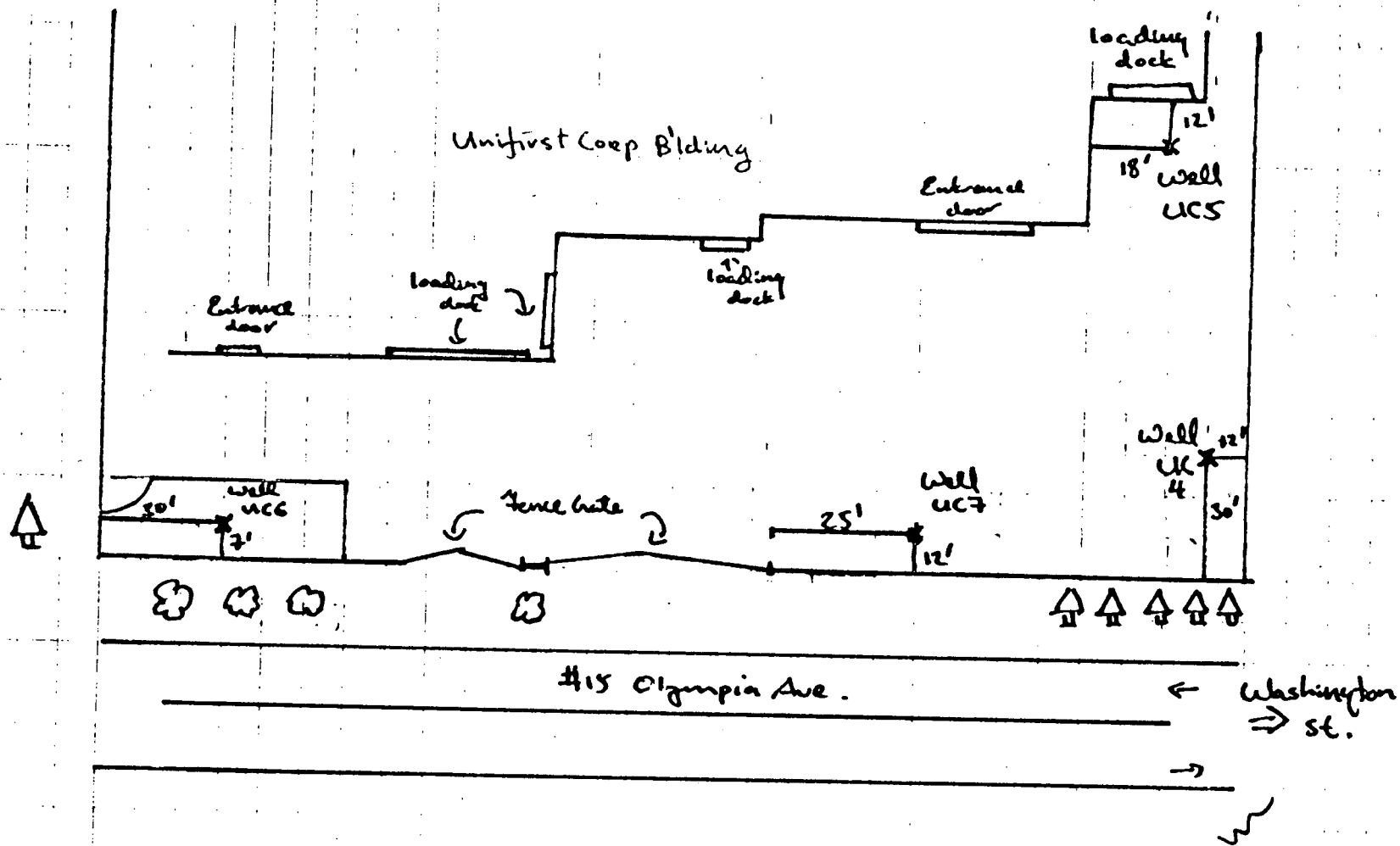


Fig I. Unifirst Coop.  
Well installation locations.

Table I.  
Unifirst Corporation - Volatile Organic Analysis  
Results  
(November 1986)

	#1	#2	<u>Trip Blanks</u>		#5	Woburn Water	Well UC4 SS1
			#3	#4			
Sample Number	63004	63006	63009	52958	52962	63005	63005
Date (yr/m/d)	861103	861104	861105	861117	861117	861103	861103
Time	07:45	07:10	07:10	07:05	07:05	12:05	11:30
Sample Matrix	Water	Water	Water	Water	Water	Soil	Soil
Depth (ft)	-	-	-	-	-	-	4-6
<u>Volatile Compounds:</u>							
Acetone	-	-	29 B	-	-	-	61 B
cis-1,3-Dichloro propene	6.1	-	-	-	-	-	-
Bromoform	9.0	-	-	-	-	-	-
1,1,2,2-Tetra chloroethane	10.0	-	-	-	-	-	-
Chloroform	-	-	-	-	-	9.6	-
Tetrachloroethene	-	-	-	-	-	-	8.8
Hexane	-	-	-	-	-	-	9

Note: Woburn water was occasionally used during the drilling process.  
The estimated concentrations are in PPB.

Soil

Table I. (cont.)  
Unifirst Corporation - Volatile Organic Analysis  
Results  
(November 1986)

	Well UC5		Well UC6				Well UC7		
	SS1	SS2	SS1	SS2	SS3	SS5	#1	#2	#2A
Sample Number	63007	63008	63010	63011	63012	63013	52959	52960	52961
Date (yr/m/d)	861104	861104	861105	861105	861105	861105	861110	861110	861110
Time	09:00	09:23	07:39	07:45	08:00	11:35	11:00	11:30	11:30
Sample Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Depth (ft)	0-2	4-6	0-2	2-4	4-6	18-20	1	2	2
<u>Volatile Compounds:</u>									
Methylene Chloride	-	-	-	-	-	-	7 B	7 B	25B
Acetone	170B	105B	96 B	67 B	75 B	88 B	12B	8JB	10JB
1,1,1-Trichloro ethane	12	-	-	-	-	-	-	-	-
Tetrachloroethene	170	-	-	-	-	-	61	-	10
Toluene	6.0	-	-	-	-	-	-	-	-
Hexane	2.8	0.8	1.2	3	0.7	1	-	-	-
Ethane,1,1,2-Trichloro-1,2,2-Trifluoro	-	-	-	-	-	-	32	-	-

Note: Sample UC7-#2 and #2A are duplicate samples.  
The estimated concentrations are in PPB.

Table I. (cont.)  
Unifirst Corporation - Volatile Organic Analysis  
Results  
(November 1986)

---

	SS1*	Well UC7		
		SS1A	SS2	SS3
Sample Number	52963	52966	52964	52965
Date (yr/m/d)	861117	861117	861117	861117
Time	10:45	10:45	11:05	11:25
Sample Matrix	Soil	Soil	Soil	Soil
Depth (ft)	2-4	2-4	4-6	6-6.5

Volatile Compounds:

Methylene Chloride	6 B	5JB	7B
Acetone	26B	20B	30B
Ethane,1,1-oxybis	10	-	-
Hexane	16	-	-

---

\*Note: SS1 and SS1A are duplicate samples. Sample SS1 sample was not analyzed by the contract lab. The estimated concentrations are in PPB.

Table II.

Data Reporting Qualifiers

- Value - If the result is a value greater than or equal to the Contract Required Detection Limit (CRDL), the value is reported.
- U - Indicates that the compound was analyzed for but not detected. The minimum CRDL for the sample with the U (e.g. 10U) is reported based on necessary concentration or dilution actions.
- J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response factor is assumed, or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified CRDL but greater than zero.
- C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides greater than or equal to 10ng/ul in the final extract should be confirmed by GC/MS.
- B - This flag is used when the analyte is found in the blank as well as in the sample. It indicates a possible blank contamination and warns the user to take appropriate action.
- Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Soil Boring Data Collected by EPA

Duplicate

[illegible]